Table 6-4. Error Codes

If the error is repeatable, perform the response steps in the order they are listed until the error is corrected. Following repair, use the applicable maintenance software to perform the required tests.

PC Unit

Error Code	Subsystem	Explanation	Response
100.1010	Logic Board	Error detected during CPU test.	Replace Logic Board.
100.1070	Logic Board	Hardware watchdog test failure.	Replace Logic Board.
100.1080	Logic Board	Data written to I/O-protected RAM not verifying correctly.	Replace Logic Board.
100.1090	Logic Board	Error detected during DRAM test. First parameter contains error address.	Replace Logic Board.
100.1100	Logic Board	Error detected during SRAM test. First parameter contains error address.	Replace Logic Board.
100.1110	Logic Board	Flash file device containing application failed CRC test. First parameter contains CRC calculated by test routine, and second parameter contains CRC contained in device.	Replace Logic Board.
100.1120	Logic Board	Boot flash device containing boot code failed CRC test. First parameter contains CRC calculated by test routine, and second parameter contains CRC contained in device.	Replace Logic Board.
100.1130	Logic Board	Time read from battery-backed RTC not changing.	Replace Logic Board.
100.1140	Logic Board	Time read from RTC not changing.	Replace Logic Board.
100.1180	Logic Board	RTC differs from operating system clock by more than 1 minute.	Replace Logic Board.
100.1210	Logic Board	Option board ID conflict. Multiple option boards responded with same ID.	Replace Logic Board.

Table 6-4. Error Codes (Continued)

PC Unit (Continued)

Error Code	Subsystem	Explanation	Response
100.1220	Logic Board	Processor exception or corrupted code.	Replace Logic Board.
100.1230	Logic Board	Power supply or auxiliary processor unexpectedly reset.	Replace Logic Board.
100.1240	Logic Board	Power supply lost power.	Replace Logic Board.
100.1250	Logic Board	Unknown board type detected in option board slot.	1. Remove option board. 2. Replace option board. 3. Replace Logic Board.
100.2070	Logic Board	Power lost.	Replace Logic Board.
100.5010	Logic Board	Boot block software version not compatible with software flashed into PC Unit.	1. Reflash PC Unit. 2. Replace Logic Board.
100.5020	Logic Board	One or more 8051 processors not reporting software version data immediately after System On. 8051 missing, failed, or flashed with version that does not support reporting software version.	1. Reflash PC Unit. 2. Replace Logic Board.
100.5070	Logic Board	Powered on in system configuration mode and software access key invalid.	1. Reflash PC Unit. 2. Power up in system configuration mode.
100.6010	Logic Board	Failed attempt to write to battery-backed RAM.	1. Replace SRAM battery (lithium). 2. Replace Logic Board.
100.6020	Logic Board	Critical value data integrity failure.	Replace Logic Board.
100.6110	Logic Board	Time/date reported by operating system exceeds maximum RTC date.	1. Reset date. 2. Replace SRAM battery (lithium). 3. Replace Logic Board.
100.6130	Logic Board	Powered on in normal mode and configuration data invalid.	Power up in system configuration mode.

Table 6-4. Error Codes (Continued)

PC Unit (Continued)

Error Code	Subsystem	Explanation	Response
100.6160	Logic Board	Unexpected hardware interrupt in main processor or keypad processor.	Replace Logic Board.
100.6190	Logic Board	Current facility Data Set damaged.	1. Load new data. 2. Replace Logic Board.
100.6400	Logic Board	General CBIT failure, not specifically tied to another malfunction code.	Replace Logic Board.
100.8000	Logic Board	Operating system error.	Replace Logic Board.
110.1010	Keypad Processor	CPU failure detected during POST.	Replace Logic Board.
110.1020	Keypad Processor	ROM failure detected during POST.	Replace Logic Board.
110.1160	Keypad Processor	Internal RAM failure detected during POST.	Replace Logic Board.
110.2000	Keypad Processor	Communication error.	Replace Logic Board.
110.2040	Keypad Processor	Unknown message type.	Replace Logic Board.
110.3000	Keypad Processor	Key or tamper switch stuck closed.	Replace keypad or tamper switch.
110.5010	Keypad Processor	8051 software version not compatible with software flashed into PC Unit.	1. Reflash PC Unit. 2. Update keypad processor. 3. Replace Logic Board.
110.5020	Keypad Processor	Processor not reporting software version data immediately after System On. Processor missing, failed, or flashed with version that does not support reporting software version.	1. Reflash PC Unit. 2. Update keypad processor. 3. Replace Logic Board.
110.6000	Keypad Processor	One or more failures detected during POST.	Replace Logic Board.
110.6010	Keypad Processor	RAM failure detected during POST.	Replace Logic Board.
110.6020	Keypad Processor	Keypad failure detected during POST.	1. Replace keypad. 2. Replace Logic Board.

Table 6-4. Error Codes (Continued)

PC Unit (Continued)

Error Code	Subsystem	Explanation	Response
110.6110	Keypad Processor	Projected life span of device exceeded. System time rolled over past maximum date possible in device.	Replace Logic Board.
111.2000	Keypad Processor Communications	Communication error. Keypad Processor quit responding.	Replace Logic Board.
120.1010	Power Supply Processor	CPU failure detected during POST.	Replace Logic Board.
120.1020	Power Supply Processor	ROM failure detected during POST.	Replace Logic Board.
120.1160	Power Supply Processor	Internal RAM failure detected during POST.	Replace Logic Board.
120.4310	Power Supply Processor	Off-Line Switcher defective; low voltage on 24V supply line.	Replace Power Supply.
120.4320	Power Supply Processor	Off-Line Switcher defective; high voltage on 24V supply line.	Replace Power Supply.
120.4330	Power Supply Processor	Low voltage on nonswitched 5V supply line.	Replace Power Supply Board.
120.4340	Power Supply Processor	High voltage on nonswitched 5V supply line.	Replace Power Supply Board.
120.4350	Power Supply Processor	Low voltage on 5V supply line.	Replace Power Supply Board.
120.4360	Power Supply Processor	High voltage on 5V supply line.	Replace Power Supply Board.
120.4370	Power Supply Processor	Low voltage on 8V supply line.	Replace Power Supply Board.
120.4380	Power Supply Processor	High voltage on 8V supply line.	Replace Power Supply Board.
120.4390	Power Supply Processor	Low voltage on 3.3V supply line.	Replace Power Supply Board.
120.4400	Power Supply Processor	High voltage on 3.3V supply line.	Replace Power Supply Board.
120.4410	Power Supply Processor	Low backup voltage at capacitor used to power backup alarm.	Replace Logic Board.
120.4420	Power Supply Processor	High backup voltage at capacitor used to power backup alarm.	Replace Logic Board.

Table 6-4. Error Codes (Continued)

PC Unit (Continued)

Error Code	Subsystem	Explanation	Response
120.4430	Power Supply Processor	Low battery voltage at capacitor used to power backup alarm.	Replace Logic Board.
120.4440	Power Supply Processor	High battery voltage at capacitor used to power backup alarm.	Replace Logic Board.
120.4450	Power Supply Processor	Low watchdog 3.3 supply voltage.	1. Replace Power Supply Board. 2. Replace Logic Board.
120.4460	Power Supply Processor	High watchdog 3.3 supply voltage.	1. Replace Power Supply Board. 2. Replace Logic Board.
120.4470	Power Supply Processor	Error updating processor charging parameter.	1. Replace Power Supply Board. 2. Replace Logic Board.
120.4490	Power Supply Processor	Processor could not set charge current.	1. Replace Power Supply Board. 2. Replace Logic Board.
120.4500	Power Supply Processor	Processor charge current too high for present charge level setting on charger chip.	1. Replace Power Supply Board. 2. Replace Logic Board.
120.4510	Power Supply Processor	Battery missing or disconnected during use.	1. Replace Battery. 2. Replace Power Supply Board.
120.4520	Power Supply Processor	Battery did not respond appropriately to precharge current.	1. Replace Battery. 2. Replace Power Supply Board.
120.4530	Power Supply Processor	Battery voltage exceeded safe limits.	1. Replace Battery. 2. Replace Power Supply Board.
120.4540	Power Supply Processor	Charger chip could not be turned off by its watchdog.	Replace Power Supply Board.
120.4550	Power Supply Processor	ADC failed. Incorrect low positive reference voltage self-test value.	1. Replace Battery. 2. Replace Power Supply Board.

Table 6-4. Error Codes (Continued)

PC Unit (Continued)

Error Code	Subsystem	Explanation	Response
120.4560	Power Supply Processor	ADC failed. Incorrect high positive reference voltage self-test value.	1. Replace Battery. 2. Replace Power Supply Board.
120.4570	Power Supply Processor	ADC failed. Incorrect low negative reference voltage self-test value.	1. Replace Battery. 2. Replace Power Supply Board.
120.4580	Power Supply Processor	ADC failed. Incorrect high negative reference voltage self-test value.	1. Replace Battery. 2. Replace Power Supply Board.
120.4590	Power Supply Processor	ADC failed. Incorrect low average reference voltage self-test value.	1. Replace Battery. 2. Replace Power Supply Board.
120.4600	Power Supply Processor	ADC failed. Incorrect high average reference voltage self-test value.	1. Replace Battery. 2. Replace Power Supply Board.
120.4610	Power Supply Processor	Processor charge current too low for present charge level setting on charger chip.	1. Replace Battery. 2. Replace Power Supply Board.
120.4620	Power Supply Processor	Battery voltage too low when charging.	1. Replace Battery. 2. Replace Power Supply Board.
120.4630	Power Supply Processor	Battery voltage too high.	Replace Power Supply Board.
120.5010	Power Supply Processor	8051 software version not compatible with software flashed into PC Unit.	1. Reflash PC Unit. 2. Replace Power Supply Board. 3. Replace Logic Board.
120.5020	Power Supply Processor	Processor not reporting software version data immediately after System On. Processor missing, failed, or flashed with version that does not support reporting software version.	Replace Power Supply Board.
120.6000	Power Supply Processor	One or more failures detected during POST.	1. Replace Battery. 2. Replace Power Supply Board.

Table 6-4. Error Codes (Continued)

PC Unit (Continued)

Error Code	Subsystem	Explanation	Response
120.6010	Power Supply Processor	RAM failure detected during POST.	Replace Power Supply Board.
120.6170	Power Supply Processor	Battery not being charged and compartment temperature too high.	1. Replace Battery. 2. Replace Power Supply Board.
120.6180	Power Supply Processor	Battery not being charged and temperature too high.	1. Replace Battery. 2. Replace Power Supply Board.
121.2000	Power Supply Processor Communications	Processor quit responding.	Replace Power Supply Board.
133.6080	Audio	Backup speaker failed.	Replace backup speaker.
133.6090	Audio	Main speaker failed.	Replace main speaker.
133.6100	Audio	Backup speaker power supply failed.	Replace Logic Board.

Table 6-4. Error Codes (Continued)

PC Unit Model 8015 ①

Error Code	Subsystem	Explanation	Response
800.8000	Operating System	Software fault.	Contact Cardinal Health Technical Support.
810.9000	Logic Board	Software fault or operating system error occurred while running POLO.	1. Reflash POLO. 2. Replace Logic Board.
810.9010	Logic Board	POLO not able to boot - nonexistent application ELF file.	1. Reflash application. 2. Replace compact flash card and reflash application. 3. Replace Logic Board.
810.9020	Logic Board	POLO not able to boot - invalid application ELF file.	1. Reflash application. 2. Replace compact flash card and reflash application. 3. Replace Logic Board.
810.9030	Logic Board	POLO not able to boot - application ELF file has invalid checksum.	1. Reflash application. 2. Replace compact flash card and reflash application. 3. Replace Logic Board.
810.9340	Logic Board	POLO parameter file could not be opened while processing an update request. Occurs only while executing BOOT or LOAD shell commands.	1. Reflash application. 2. Reflash POLO. 3. Replace compact flash card and reflash application. 4. Replace Logic Board.
810.9050	Logic Board	Error occurred while updating POLO parameter file. Occurs only while executing BOOT or LOAD shell commands.	1. Reflash application. 2. Reflash POLO. 3. Replace compact flash card and reflash application. 4. Replace Logic Board.
810.9060	Logic Board	POLO running on a Logic Board it is not configured for.	1. Reflash POLO. 2. Replace Logic Board.
810.9070	Logic Board	POLO did not detect presence of internal compact flash card in slot B.	1. Replace compact flash card and reflash application. 2. Replace Logic Board.
810.9080	Logic Board	POLO could not reset and access internal compact flash card in slot B.	1. Replace compact flash card and reflash application. 2. Replace Logic Board.

Table 6-4. Error Codes (Continued)

PC Unit Model 8015 ① (Continued)

Error Code	Subsystem	Explanation	Response
810.9090	Logic Board	Compact flash card in slot B not a disk type card.	1. Replace compact flash card and reflash application. 2. Replace Logic Board.
810.9100	Logic Board	Compact flash card in slot B not supported by POLO.	1. Replace compact flash card and reflash application. 2. Replace Logic Board.
810.9105	Logic Board	Wireless card not supported by POLO.	1. Replace wireless card. 2. Replace wireless card extension board. 3. Replace Logic Board.
810.9110	Logic Board	POLO could not initialize ATA driver for a disk type card in one of compact flash card slots.	1. Replace compact flash card and reflash application. 2. Replace Logic Board.
810.9120	Logic Board	POLO could not mount volume on a disk type card in one of compact flash card slots.	1. Replace compact flash card and reflash application. 2. Replace Logic Board.
810.9130	Logic Board	Configuration tuple read from compact flash card in slot B incorrect.	1. Replace compact flash card and reflash application. 2. Replace Logic Board.
810.9135	Logic Board	Configuration tuple read from card in wireless card slot.	1. Replace wireless card. 2. Replace wireless card extension board. 3. Replace Logic Board.
810.9140	Logic Board	Function ID tuple read from compact flash card in slot B incorrect.	1. Replace compact flash card and reflash application. 2. Replace Logic Board.
810.9145	Logic Board	Function ID tuple read from wireless card incorrect.	1. Replace wireless card. 2. Replace wireless card extension board. 3. Replace Logic Board.
810.9150	Logic Board	POLO not able to create POLO directory in internal FFX file system.	1. Reflash POLO. 2. Replace Logic Board.
810.9160	Logic Board	Watchdog timer test failed while POLO was booting an application.	Replace Logic Board.

Table 6-4. Error Codes (Continued)

PC Unit Model 8015 ① (Continued)

Error Code	Subsystem	Explanation	Response
810.9170	Logic Board	POLO unable to read attribute tuples from compact flash card.	1. Replace compact flash card and reflash application. 2. Replace Logic Board.
810.9175	Logic Board	POLO unable to read attribute tuples from wireless card.	1. Replace wireless card. 2. Replace wireless card extension board. 3. Replace Logic Board.

① POLO refers to the operating system software after boot up (power up sequence).

Table 6-4. Error Codes (Continued)

Pump Module

Error Code	Subsystem	Explanation	Response
200.1010	Logic Board	Error detected during CPU test.	Replace Logic Board.
200.1030	Logic Board	64K to flash file DRAM test failed.	Replace Logic Board.
200.1040	Logic Board	Unable to write into flash memory chip used for logging.	Replace Logic Board.
200.1060	Logic Board	Watchdog failure.	Replace Logic Board.
200.1070	Logic Board	Hardware watchdog test failure.	Replace Logic Board.
200.1110	Logic Board	Flash file device containing application failed CRC test.	Replace Logic Board.
200.1120	Logic Board	Boot flash file device containing boot code failed CRC test.	Replace Logic Board.
200.1200	Logic Board	Uninitialized interrupt occurred. Default handler called.	Replace Logic Board.
200.4160	Logic Board	Motor shutoff safety switch test failed.	Replace Logic Board.
200.5010	Logic Board	Boot block software version not compatible with software flashed into Pump Module.	1. Reflash Pump Module. 2. Replace Logic Board.
200.5020	Logic Board	One or more 8051 processors not reporting software version data immediately after System On. 8051 missing, failed, or flashed with version that does not support reporting software version.	Replace Logic Board.
200.5030	Logic Board	Serial number reported by Pump Module not a recognized type.	Replace Logic Board.
200.5040	Logic Board	Pump Module software version not compatible with software flashed into PC Unit.	Reflash PC Unit or Pump Module.
200.6120	Logic Board	Critical value data integrity failure.	Replace Logic Board.
210.1010	Keypad Processor	CPU failure detected during POST.	Replace Logic Board.
210.1020	Keypad Processor	ROM failure detected during POST.	Replace Logic Board.

Table 6-4. Error Codes (Continued)

Pump Module (Continued)

Error Code	Subsystem	Explanation	Response
210.1160	Keypad Processor	Internal RAM failure detected during POST.	Replace Logic Board.
210.2040	Keypad Processor	Response message received when not expected.	Replace Logic Board.
210.4040	Keypad Processor	Clear Display BSYNC failure detected during POST.	Replace Logic Board.
210.5010	Keypad Processor	8051 software version not compatible with software flashed into Pump Module.	Reflash PC Unit.
210.5020	Keypad Processor	Processor not reporting software version data immediately after System On. Processor missing, failed, or flashed with version that does not support reporting software version.	Replace Logic Board.
210.6000	Keypad Processor	One or more failures detected during POST.	Replace Logic Board.
210.6010	Keypad Processor	RAM failure detected during POST.	Replace Logic Board.
210.6020	Keypad Processor	Keypad failure detected during POST.	Replace Keypad.
210.6030	Keypad Processor	Alarm LED failure detected during POST.	Replace defective alarm LED.
210.6040	Keypad Processor	Display failure detected during POST.	Replace defective display.
211.2000	Keypad Processor Communications	Unspecified communication error.	Replace Logic Board.
220.1000	Safety Processor	Internal error.	Replace Logic Board.
220.1010	Safety Processor	CPU failure detected during POST.	Replace Logic Board.
220.1020	Safety Processor	ROM failure detected during POST.	Replace Logic Board.
220.1160	Safety Processor	Internal RAM failure detected during POST.	Replace Logic Board.

Table 6-4. Error Codes (Continued)

Pump Module (Continued)

Error Code	Subsystem	Explanation	Response
220.5010	Safety Processor	8051 software version not compatible with software flashed into Pump Module.	Replace Logic Board.
220.5020	Safety Processor	Processor not reporting software version data immediately after System On. Processor missing, failed, or flashed with version that does not support reporting software version.	Replace Logic Board.
220.6000	Safety Processor	One or more failures detected during POST.	Replace Logic Board.
220.6010	Safety Processor	RAM failure detected during POST.	Replace Logic Board.
221.2000	Safety Processor Communications	Unspecified communication error.	Replace Logic Board.
221.2010	Safety Processor Communications	Timely response to watchdog message not received.	Replace Logic Board.
221.2020	Safety Processor Communications	Incorrect response message received.	Replace Logic Board.
221.2030	Safety Processor Communications	Corrupted response message received.	Replace Logic Board.
221.2040	Safety Processor Communications	Response message received when not expected.	Replace Logic Board.
221.2050	Safety Processor Communications	Received command that cannot be interpreted.	Replace Logic Board.
221.2060	Safety Processor Communications	Not receiving heartbeat messages in a timely manner.	Replace Logic Board.
222.1000	Safety Processor Cross-Check	Measured illegal or inaccurate action by main processor - reason undetermined.	Replace Logic Board.
222.2030	Safety Processor Cross-Check	Corrupted response message received.	Replace Logic Board.

Table 6-4. Error Codes (Continued)

Pump Module (Continued)

Error Code	Subsystem	Explanation	Response
222.2040	Safety Processor Cross-Check	Response message received when not expected.	Replace Logic Board.
222.4010	Safety Processor Cross-Check	High infusion rate detected.	1. Replace AIL Assembly (motor encoder is part of this assembly). 2. Replace Motor Controller Board. 3. Replace Logic Board.
222.4020	Safety Processor Cross-Check	Low infusion rate detected	1. Replace AIL Assembly (motor encoder is part of this assembly). 2. Replace Motor Controller Board. 3. Replace Logic Board.
222.4030	Safety Processor Cross-Check	Motor stall detected.	1. Replace AIL Assembly (motor encoder is part of this assembly). 2. Replace Motor Controller Board. 3. Replace Logic Board.
222.4040	Safety Processor Cross-Check	Detected encoder out of sync with motor pulses.	1. Replace AIL Assembly (motor encoder is part of this assembly). 2. Replace Logic Board.
222.4050	Safety Processor Cross-Check	Excessive air-in-line detected.	1. Replace AIL Assembly. 2. Replace Logic Board.
222.4060	Safety Processor Cross-Check	Over-infusion state detected (infusion past VTBI limit).	1. Replace AIL Assembly (motor encoder is part of this assembly). 2. Replace Motor Controller Board. 3. Replace Logic Board.
222.4160	Safety Processor Cross-Check	Motor shutoff safety switch test failed.	Replace Logic Board.

Table 6-4. Error Codes (Continued)

Pump Module (Continued)

Error Code	Subsystem	Explanation	Response
222.4170	Safety Processor Cross-Check	Detected infusion parameter out-of-range. Parameter possibilities include: rate, VTBI, AIL limit, VPMR, burst rate threshold, maintenance mode flag, infuse all flag, check air-in-line flag.	Replace Logic Board.
222.4180	Safety Processor Cross-Check	Improper door and/or flow stop state detected during infusion.	1. Replace AIL Assembly. 2. Replace Door Assembly.
222.4190	Safety Processor Cross-Check	Received command to open safety switch when switch is already open, or to close when already closed.	Replace Logic Board.
222.4200	Safety Processor Cross-Check	Motor activity detected when motor should be idle.	1. Replace AIL Assembly (motor encoder is part of this assembly). 2. Replace Motor Controller Board. 3. Replace Logic Board.
240.4140	Bottle-Side Pressure Sensor	Voltage too low. Sensor may be broken.	Replace bottle-side pressure sensor.
240.4150	Bottle-Side Pressure Sensor	Voltage too high. Sensor may be broken.	Replace bottle-side pressure sensor.
241.4140	Patient-Side Pressure Sensor	Voltage too low. Sensor may be broken.	Replace patient-side pressure sensor.
241.4150	Patient-Side Pressure Sensor	Voltage too high. Sensor may be broken.	Replace patient-side pressure sensor.
242.4000	Motor/Encoder	Encoder feature not recognized; software unable to determine whether mechanism rotation is too slow or too fast.	1. Replace AIL Assembly (motor encoder is part of this assembly). 2. Replace Motor Controller Board. 3. Replace Logic Board.

Table 6-4. Error Codes (Continued)

Pump Module (Continued)

Error Code	Subsystem	Explanation	Response
242.4010	Motor/Encoder	Fluid delivery mechanism turning too quickly (infusion rate high).	1. Replace AIL Assembly (motor encoder is part of this assembly). 2. Replace Motor Controller Board. 3. Replace Logic Board.
242.4020	Motor/Encoder	Fluid delivery mechanism turning too quickly (infusion rate low).	1. Replace AIL Assembly (motor encoder is part of this assembly). 2. Replace Motor Controller Board. 3. Replace Logic Board.
242.4030	Motor/Encoder	Motor stall detected.	1. Ensure motor connector is securely connected. 2. Replace AIL Assembly (motor encoder is part of this assembly). 3. Replace Motor Controller Board. 4. Replace Logic Board.
243.4070	Air-in-Line	Failed self test.	Replace AIL Assembly.
244.3020	Safety Clamp	Safety clamp read in safe state (CLOSED) when sensor was unpowered and should have read in unsafe (OPEN) state.	1. Replace AIL Assembly (safety clamp is part of this assembly). 2. Replace Logic Board.
245.3020	Door	Door sensor read in safe state (CLOSED) when sensor was unpowered and should have read in unsafe (OPEN) state.	1. Replace AIL Assembly (door sensor is part of this assembly). 2. Replace Logic Board.
260.4080	Power Supply	3.3V AD voltage at least 8.4% lower than voltage in specification.	Replace Motor Controller Board.
260.4090	Power Supply	3.3V AD voltage at least 8.4% higher than voltage in specification.	Replace Motor Controller Board.
260.4100	Power Supply	5V AD voltage at least 8.4% lower than voltage in specification.	Replace Logic Board.

Table 6-4. Error Codes (Continued)

Pump Module (Continued)

Error Code	Subsystem	Explanation	Response
260.4110	Power Supply	5V AD voltage at least 8.4% higher than voltage in specification.	Replace Logic Board.
260.4120	Power Supply	Pressure Sensor voltage at least 8.4% lower than voltage in specification.	Replace Logic Board.
260.4130	Power Supply	Pressure Sensor voltage at least 8.4% higher than voltage in specification.	Replace Logic Board.
2XX.2080	Communications	Module poll not in odd/even sequence.	1. Replace IUI connectors. 2. Replace Logic Board.
2XX.2090	Communications	Seventh or greater module attached.	None
2XX.3000	Keypad Processor	Keypad key stuck closed.	Replace Keypad.
2XX.4700	ADC	ADC failed to calibrate itself within specified time.	Replace Logic Board.
2XX.4710	ADC	ADC failed to complete a conversion within specified time.	Replace Logic Board.
2XX.5080	Communications	Module's version data not validated by PC Unit within specified time.	None
2XX.6400	Logic Board or Display Board	General CBIT failure, not specifically tied to another malfunction code.	Replace Logic Board or Display Board.

Table 6-4. Error Codes (Continued)

PCA Module and Syringe Module

Error Code	Subsystem	Explanation	Response ①
350.6600	Logic Board	Watchdog circuit failed POST.	Replace Logic Board.
350.6630	Force Sensor	Pressure not tracked by force sensor.	Replace Force Sensor Assembly.
350.6680	Logic Board	Timer bases; clock frequency out of sync.	Replace Logic Board.
351.6610	Motor Watchdog	Unexpected countdown interrupt.	Replace Motor and/or Logic Board.
351.6660	Linear Sensor	Movement error; predicted change in Linear Sensor inconsistent with expected position.	Replace Linear Sensor.
351.6720	Motor Logic Board	Motor steps accumulating too fast or too slow.	Replace Motor and/or Logic Board.
351.6730	Motor Logic Board	Too many steps in motor step sample.	Replace Motor and/or Logic Board.
351.6740	Engagement Nut	Nut not engaged during infusion; lever not opened.	Replace Logic Board, and/or nut engagement sensor or engagement nut.
351.6750	Engagement Nut	Attempt to engage nut timed out before engaging.	Replace Logic Board, and/or nut engagement sensor or engagement nut.
351.6760	Module	Calibration flag not set. Module not calibrated.	Calibrate, as required.
351.6770	Pressure Sensing Disc Logic Board (Syringe Module)	Pressure sensing disc circuit test failed during POST.	Replace pressure sensing disc and/or Logic Board.
352.6640	Force Sensor	Force sensor output is zero or is outside acceptable range.	Replace Force Sensor Assembly.
352.6700	Logic Board Force Sensor	Force sensor circuit check failure.	Replace Logic Board or Force Sensor Assembly.
353.6650	Linear Sensor	Linear Sensor output is zero or is outside acceptable range.	Replace Linear Sensor.
354.6670	Pressure Sensing Disc (Syringe Module)	Pressure sensor output is outside acceptable range.	Replace pressure sensing disc.

Table 6-4. Error Codes (Continued)

PCA Module and Syringe Module (Continued)

Error Code	Subsystem	Explanation	Response ①
354.6690	Logic Board	Pressure Sensor current outside acceptable range.	Replace Logic Board or Pressure Sensor.
356.6710	Digital Sensor	Digital sensor outside acceptable range during no-power test.	Replace digital sensor.
356.6780	PCA Handset	System detected PCA Handset Key stuck at power-up.	Replace PCA Handset.
3XX.2080	Communications	Module poll not in odd/even sequence.	1. Replace IUI connectors. 2. Replace Logic Board.
3XX.2090	Communications	Seventh or greater module attached.	None
3XX.3000	Keypad	Keypad key stuck closed.	Replace Keypad.
3XX.4700	Logic Board	ADC failed to calibrate itself within specified time.	Replace Logic Board.
3XX.4710	Logic Board	ADC failed to complete a conversion within specified time.	Replace Logic Board.
3XX.5080	Communications	Module's version data not validated by PC Unit within specified time.	None
3XX.6400	Display Board	General CBIT failure, not specifically tied to another malfunction code.	Replace Logic Board or Display Board.
3XX.7200	Linear Sensor	Plunger position Linear Sensor readings indicate potentiometer wiper is making intermittent contact with resistive surface (log only).	Replace Linear Sensor.
3XX.7210	Logic Board Linear Sensor	Plunger position sampler cleared module's calibrated flag because sensor readings indicate possible contamination continuously for 1.08 mm of motion (log only).	1. Calibrate Linear Sensor. 2. Replace Linear Sensor. 3. Replace Logic Board.
3XX.7220	Logic Board Linear Sensor	Motor running and plunger about to contact lower mechanical stop.	1. Calibrate Linear Sensor. 2. Replace Linear Sensor. 3. Replace Logic Board.

① Replacing the Force Sensor Assembly or Logic Board Assembly in a PCA Module or Syringe Module with version 7 or earlier software must be performed at the depot. Reference the PCA Module / Syringe Module Service Manual for further information.

Table 6-4. Error Codes (Continued)

SpO_2 Module

Error Code	Subsystem	Explanation	Response
4XX.2080	Communications	Module poll not in odd/even sequence.	1. Replace IUI connectors. 2. Replace Logic Board.
4XX.2090	Communications	Seventh or greater module attached.	None
4XX.3000	Keypad Processor	Keypad key stuck closed.	Replace Keypad.
4XX.5080	Communications	Module's version data not validated by PC Unit within specified time.	None
4XX.6200	SpO_2 Board	Failed "continuous built-in tests".	1. Cycle power. 2. Replace SpO_2 Board.
4XX.6210	SpO_2 Board	Communications error.	1. Cycle power. 2. Replace SpO_2 Board. 3. Replace cable between Logic Board and SpO_2 Board. 4. Replace Logic Board.
4XX.6220	SpO_2 Board	Configurations error.	1. Cycle power. 2. Replace SpO_2 Board.
4XX.6230	SpO_2 Board	Received value "out of range".	1. Replace Sensor. 2. Cycle power. 3. Replace SpO_2 Board.
4XX.6240	SpO_2 Board	Missing sensor status.	1. Replace Sensor. 2. Cycle power. 3. Replace SpO_2 Board.
4XX.6300	Display Board	Shorted segment in 7-segment display.	Replace Display Board.
4XX.6310	Display Board	Open Segment in 7-Segment Display.	Replace Display Board.
4XX.6320	Display Board	Shorted alarm LED.	Replace Display Board.
4XX.6330	Display Board	Open alarm LED.	Replace Display Board.
4XX.6400	Display Board	General CBIT failure, not specifically tied to another malfunction code.	Replace Display Board.
4XX.6500	SpO_2 Board	Serious module error.	Replace SpO_2 Board.

Table 6-4. Error Codes (Continued)

SpO_2 Module (Continued)

Error Code	Subsystem	Explanation	Response
4XX.6510	SpO_2 Board	Module error requires power to be cycled.	Replace SpO_2 Board.
4XX.6520	SpO_2 Board	Module error requires it to be reset.	Replace SpO_2 Board.
4XX.6530	SpO_2 Board	Transient error.	Replace SpO_2 Board.
4XX.6560	SpO_2 Board	Power-on test error.	Replace SpO_2 Board.
4XX.6580	SpO_2 Board	Unknown error.	Replace SpO_2 Board.

Table 6-4. Error Codes (Continued)

$EtCO_2$ Module

Error Code	Subsystem	Explanation	Response
5XX.2080	Communications	Module poll not in odd/even sequence.	1. Replace IUI connectors. 2. Replace Logic Board.
5XX.2090	Communications	Seventh or greater module attached.	None
5XX.3000	Keypad Processor	Keypad key stuck closed.	Replace Keypad.
5XX.5080	Communications	Module's version data not validated by PC Unit within specified time.	None
5XX.6200	$EtCO_2$ Board	Failed continuous built-in tests.	Replace $EtCO_2$ Board.
5XX.6210	$EtCO_2$ Board	Communications error.	1. Replace $EtCO_2$ Board. 2. Replace cable between Logic Board and $EtCO_2$ Board. 3. Replace Logic Board.
5XX.6220	$EtCO_2$ Board	Configuration error.	Replace $EtCO_2$ Board.
5XX.6230	$EtCO_2$ Board	Received value out of range.	1. Replace Microstream® Disposable device. 2. Replace $EtCO_2$ Board.
5XX.6240	$EtCO_2$ Board	Missing sensor status.	1. Replace Microstream® Disposable device. 2. Replace $EtCO_2$ Board.
5XX.6400	Display Board	General CBIT failure, not specifically tied to another malfunction code.	Replace Display Board.
5XX.6500	$EtCO_2$ Board	$EtCO_2$ Board took too long to perform an action.	Replace $EtCO_2$ Board.

Table 6-4. Error Codes (Continued)

Communications Interface (CI) Board

Error Code	Subsystem	Explanation	Response
600.6800	CI Board	CI Board failed POST test.	Replace CI Board.
600.6820	CI Board	CI Board initialization failure.	1. Load network parameters. 2. Replace radio card. 3. Flash CI Board. 4. Replace CI Board.
600.6830	CI Board	CI Board configuration failure.	Load network parameters.
600.6840	CI Board	CI Board to server connect failure.	1. Check network signal strength. 2. Load network parameters. 3. Replace radio card.
600.6850	CI Board	CI Board not responding.	1. Flash CI Board. 2. Load network parameters. 3. Replace radio card. 4. Replace CI Board.
600.6860	CI Board	CI Board to server disconnect failure.	Replace CI Board.
600.6870	CI Board	CI Board communications error.	Replace radio card.

Table 6-4. Error Codes (Continued)

Log Only

Error Code	Explanation
2100	Lost interrupt check response.
2200	2892 and 16x50 serial devices.
2300	Model 800 cleanup task recorded interrupt acknowledge lost.
3010	Nurse Call switch open when expected to be closed.
6070	PC Unit RTC battery failure.
6140	Unexpected interrupt or exception, after which a software fault is signaled.
6150	Operating system error, after which a software fault is signaled.
6340	7-segment display status report.
6350	7-segment display status report.
6540	SpO_2 informational reports.
6570	SpO_2 warmer error.
7500	Report that system time cannot be corrected by adding skew, after which a software fault is signaled.